Bayer Crop Science LP
Theodore, Alabama
503-0137-X001
Provisos

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations, or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Upon the request of the Department, each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than 1 hour, the intent to shut down shall be reported to the Air Division at least 24 hours prior to the planned shutdown, unless accompanied by the immediate shutdown of the emission source.

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than 1 hour, the person responsible for such equipment shall notify the Department within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

7. This process including all air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. This permit expires and the application is cancelled if construction has not begun within 24 months of the date of issuance of the permit.

9. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written tests results are to be reported to the Air Division within 30 working days of completion of testing.

Particulates	( )	Carbon Monoxide	( )
Ammonia	( )	Nitrogen Oxides	(X)
Volatile Organic Compounds	(X)	Hydrogen Chloride	(X)

Testing is required for control devices S01 & S03.

10. On completion of construction of the device for which this permit is issued, notification of the fact is to be given to the Chief of the Air Division. Authorization to operate the unit must be received from the Chief of the Air Division. Failure to notify the Chief of the Air Division of construction and/or operation without authorization could result in revocation of this permit.

11. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

12. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

13. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

14. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.

15. Records will be maintained of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the process equipment and any malfunction of the air pollution control equipment. These records will be kept in a permanent form suitable for inspection and will be retained for at least two years following the date of each occurrence.

16. The Department must be notified in writing at least 30 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

    (1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

    (2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

    (3) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

    (4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

    A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

    All test reports must be submitted to the Department within 30 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.

17. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.

18. A device capable of continuously monitoring oxidizer temperature shall be installed, calibrated, maintained, and properly operated in association with the thermal oxidizer systems S01 & S03.

19. As an indicator of compliance, the thermal oxidizers associated with emission points S01 & S03 shall establish a minimum daily average operating temperature based on performance testing. The proposed temperature shall be submitted with the required test report and must be approved by the Department.

20. In order to insure that the thermal oxidizers associated with emission points S01 & S03 are in compliance with their respective emission limits, the facility shall continuously monitor the established firebox temperature and record a measurement at least once every 15 minutes.

21. The facility shall maintain records of the hourly average firebox temperatures and the daily average for the thermal oxidizers associated with emission points S01 & S03. These records, which may be in the form of a log or a checklist, shall be kept up-to-date, readily accessible, and in a form suitable for inspection for five years.

22. As an indicator of compliance, emission points S01 & S03 shall be checked for the presence or absence of visible emissions at least once per day while the equipment associated with these points is in operation and being utilized as the primary control device. If visible emissions are noted, the facility must investigate and take appropriate corrective action within 24 hours and must conduct an additional observation to confirm that the emissions are reduced to normal.

23. The facility shall maintain records of its daily visual inspection of emission points S01 & S03. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The facility shall keep records of the corrective action taken in the event visible emissions are observed.

24. At any time, should visible emissions be observed from emission points S01 or S03 by plant personnel or a representative of the Department, action to correct this problem should be initiated within 24 hours. Records of each occurrence of observed visible emissions shall be maintained in a logbook suitable for inspection by the Department and should include the findings of the incident and what action was taken to correct the problem.

25. Thermal Oxidizer S03 shall be maintained in an operable condition so that it may be put into service at any time as the primary control device. S03 shall be maintained in an operable condition by feeding natural gas to the unit at a minimum rate of 0.35 mmBTU/hr.

26. As an indicator of compliance, thermal oxidizers S01 & S03 shall establish a minimum ammonia (or urea) injection rate based on a daily average and record a measurement at least once every 15 minutes. The proposed parameter shall be submitted with the initial test report required for this permit and must be approved by the Department. The facility shall provide supporting data (manufacturer's guarantee or testing) as a basis for the established parameters.

27. The facility shall maintain records of anytime that the ammonia (or urea) injection rate for thermal oxidizers S01 & S03 falls below the established limit, as calculated on a daily average, while the facility is in operation. A record shall be maintained of the reason and duration for the deviation, and shall be kept in a form suitable for inspection for a period of 5 years.

28. The nitrogen oxide emission rate from the thermal oxidizer system (S01) shall not exceed 3.45 lb/hr as measured in accordance with 40 CFR Part 60 Method 7E.

29. The nitrogen oxide emission rate from the thermal oxidizer system (S03) shall not exceed 3.45 lb/hr as measured in accordance with 40 CFR Part 60 Method 7E when the unit is operating as the primary control device.

30. The carbon monoxide emission rate from the thermal oxidizer system (S01) shall not exceed 1.15 lb/hr as measured in accordance with 40 CFR Part 60 Method 10.

31. The carbon monoxide emission rate from the thermal oxidizer system (S03) shall not exceed 1.15 lb/hr as measured in accordance with 40 CFR Part 60 Method 10 when the unit is operating as the primary control device.

32. Volatile Organic Compounds (VOCs) and Organic Hazardous Air Pollutants (OHAPs) from S01 & S03 shall not exceed 20 ppmv.

33. The VOC emission rate from emission point S01 shall not exceed 0.46 lb/hr as compound measured in accordance with 40 CFR Part 60, Appendix A Method 25A (latest edition) or another method specifically approved by the Department.

34. As an indicator of compliance, the HCl Scrubber (S01) shall establish a minimum scrubber flowrate, pressure drop, and pH based on a daily average and record a measurement at least once every 15 minutes. The proposed parameters shall be submitted with the initial test report required for this permit and must be approved by the Department. The facility shall provide supporting data (manufacturer's guarantee or testing) as a basis for the established parameters.

35. The facility shall maintain records of anytime that the scrubber flowrate, pressure drop, or pH for the HCl Scrubber (S01) falls below the established limits, as calculated on a daily average, while the facility is in operation. A record shall be maintained of the reason and duration for the deviation, and shall be kept in a form suitable for inspection for a period of 5 years.

36. As an indicator of compliance, the HCl Scrubber (S03) shall establish a minimum scrubber flowrate, pressure drop, and pH based on a daily average and record a measurement at least once every 15 minutes. The proposed parameters shall be submitted with the initial test report required for this permit and must be approved by the Department. The facility shall provide supporting data (manufacturer's guarantee or testing) as a basis for the established minimum flowrate. These requirements are only applicable when S03 is operating as the primary control device.

37. The facility shall maintain records of anytime that the scrubber flowrate, pressure drop, or pH for the HCl Scrubber (S03) falls below the established limits when the unit is operating as the primary control device, as calculated on a daily average, while the facility is in operation. A record shall be maintained of the reason and duration for the deviation, and shall be kept in a form suitable for inspection for a period of 5 years.

38. The process flare (S02) shall only be utilized during start-up of the process. Records shall be maintained of the duration for the start-up process, and shall be kept in a form suitable for inspection for a period of 5 years.

39. The process flare (S02) shall comply with the requirements for flares as specified in 40 CFR 63.11(b).

40. As an indicator of compliance, the Bleach Scrubber (S04) and the GA50 Water Scrubber (S08) shall establish a minimum scrubber flowrate or pressure drop based on a daily average and record a measurement at least once every 15 minutes. The proposed parameters shall be submitted with the initial test report required for this permit and must be approved by the Department. The facility shall provide supporting data (manufacturer's guarantee or testing) prior to initial operation of the scrubber as a basis for the established minimum flowrate.

41. The facility shall maintain records of anytime that the scrubber flowrate for the Bleach Scrubber (S04) or the GA50 Water Scrubber (S08) falls below the established limits, as calculated on a daily average, while the facility is in operation. A record shall be maintained of the reason and duration for the deviation, and shall be kept in a form suitable for inspection for a period of 5 years.

42. The two 65,000 gallon HCl storage tanks shall be routed to the HCl Scrubber (S05) at all times for control.

43. As an indicator of compliance, the HCl Scrubber (S05) shall establish a minimum scrubber flowrate, pressure drop and pH based on a daily average and record a measurement at least once every 15 minutes. The proposed parameters shall be submitted with the initial test report required for this permit and must be approved by the Department. The facility shall provide supporting data (manufacturer's guarantee or testing) prior to initial operation of the scrubber as a basis for the established minimum flowrate.

44. The facility shall maintain records of anytime that the scrubber flowrate, pressure drop, or pH for the HCl Scrubber (S05) falls below the established limits, as calculated on a daily average, while the facility is in operation. A record shall be maintained of the reason and duration for the deviation, and shall be kept in a form suitable for inspection for a period of 5 years.

45. The PM/PM10 emission rate from the Ammonium Chloride Water Scrubber (S06) shall not exceed 0.10 lb/hr as measured in accordance with 40 CFR Part 51 Appendix M Method 202 and 40 CFR Part 60, Method 5 or another method approved by the Department.

46. The PM/PM10 emission rate from the Ammonium Chloride Filter (S07) shall not exceed 0.10 lb/hr as measured in accordance with 40 CFR Part 51 Appendix M Method 202 and 40 CFR Part 60, Method 5 or another method approved by the Department.

47. The PM/PM10 emission rate from S06 & S07 shall not exceed the emission rate allowed under ADEM Admin Code 335-3-4-.04.

48. As an indicator of compliance, emission points S06 & S07 shall be checked for the presence or absence of visible emissions at least once per week while the equipment associated with these points is in operation. If visible emissions are noted, the facility must investigate and take appropriate corrective action within 24 hours and must conduct an additional observation to confirm that the emissions are reduced to normal.

49. The facility shall maintain records of its weekly visual inspection of emission points S06 & S07. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The facility shall keep records of the corrective action taken in the event visible emissions are observed.

50. At any time, should visible emissions be observed from emission points S06 & S07 by plant personnel or a representative of the Department, action to correct this problem should be initiated within 24 hours. Records of each occurrence of observed visible emissions shall be maintained in a logbook suitable for inspection by the Department and should include the findings of the incident and what action was taken to correct the problem.

51. As an indicator of compliance, the Ammonium Chloride Scrubber (S06) shall establish a minimum scrubber flowrate based on a daily average and record a measurement at least once every 15 minutes. The proposed parameter shall be submitted with the initial test report required for this permit and must be approved by the Department. The facility shall provide supporting data (manufacturer's guarantee or other method) prior to initial operation of the scrubber as a basis for the established minimum flowrate.

52. The facility shall maintain records of anytime that the scrubber flowrate for the Ammonium Chloride Scrubber (S06) falls below the established limit, as calculated on a daily average, while the facility is in operation. A record shall be maintained of the reason and duration for the deviation, and shall be kept in a form suitable for inspection for a period of 5 years.

53. This facility is subject to the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) listed in 40 CFR Part 63, Subpart VVVVVV.

54. This facility shall be considered to be in compliance with Subpart VVVVVV by complying with the requirements equivalent to those found in 40 CFR Part 63, Subpart MMM.

55. This production facility shall meet the requirements equivalent to the Pesticide Active Ingredient NESHAP (PAI), as specified in 40 CFR Part 63, Subpart MMM.

56. This production facility shall meet equivalent requirements of the Hazardous Organic NESHAP, as specified in 40 CFR Part 63, Subpart H as referenced by 40 CFR Part 63, Subpart MMM.

57. This production facility is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01 for opacity.

58. Any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

59. The facility shall meet equivalent standards for the leak detection and repair program found in 40 CFR Part 63 Subpart H for HAPs and VOCs, as listed in 63.162 - 63.180 as referenced and modified by 40 CFR 63.1363 of Subpart MMM.

60. Test methods and procedures for the leak detection and repair (LDAR) program equivalent to 63.180 of Subpart H of the HON shall be followed.

61. Leak detection monitoring requirements equivalent to those outlined in 40 CFR Part 63 Subpart H, as listed in 63.162 – 63.180, shall be followed for all subject equipment.

62. All applicable process vents shall be controlled equivalent to the requirements of 40 CFR 63.1362(b) of 40 CFR Part 63, Subpart MMM.

63. All applicable storage vessels shall be controlled equivalent to the requirements of 40 CFR 63.1362(c) of 40 CFR Part 63, Subpart MMM.

64. All applicable wastewater streams shall be controlled equivalent to the requirements of 40 CFR 63.1362(d) of 40 CFR Part 63, Subpart MMM..

65. Standards equivalent to the heat exchanger systems of 40 CFR Part 63 Subpart F as listed in 63.104, shall be met as applicable.

66. The facility shall maintain records of all data used to determine the compliance status with Subpart MMM equivalent to those outlined in 40 CFR 63.1368(f).

67. A Notice of Compliance Status (NOCS) Report shall be submitted equivalent to the requirements of 40 CFR 63.1368(f) Subpart MMM. Any changes to information submitted in the NOCS must be revised and the NOCS resubmitted with the next Subpart MMM Periodic Compliance Report, equivalent to the requirements of 40 CFR 63.1368(h). For any NOCS changes equivalent to those outlined in 63.1368(h)(2), the NOCS must be resubmitted a minimum of sixty (60) days prior to implementation.

68. The facility shall submit Semiannual Compliance reports containing information equivalent to that outlined in 40 CFR 63.1368(g) of Subpart MMM and 40 CFR 63.182 of Subpart H.

69. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.

70. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

71. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the permit readily available for inspection by any or all persons who may request to see it.

72. The permittee shall submit an annual compliance certification to the Department concerning this permit no later than 60 days after the end of each calendar year. The compliance certification shall include the following:

    1. The identification of each term or condition of this permit that is the basis of the certification.
    2. The compliance status, whether continuous or intermittent.
    3. The method(s) used for determining the compliance status of the source, currently and over the reporting period.
    4. Other facts the Department may require to determine the compliance status of the source.

    The compliance certification shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

Bayer Crop Science LP
Theodore, Alabama
503-0137-X002
Provisos

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than **1 hour**, the person responsible for such equipment shall notify the Air Division within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Air Division shall be notified when the breakdown has been corrected.

6. This process, including all air pollution control devices and capture systems for which this permit is issued, shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

7. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

8. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

9. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

10. The Air Division must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

    (a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

    (b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

    (c) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

    (d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

    A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

    All test reports must be submitted to the Air Division within 30 days of the actual completion of the test, unless an extension of time is specifically approved by the Air Division.

11. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.

12. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.

13. In accordance with ADEM Admin. Code. r. 335-3-4-.01(1), any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.

14. In order to insure that the construction of these emergency generators would not be significant for any pollutant with respect to PSD, the stationary emergency reciprocating internal combustion engines (RICE) associated with this permit shall be limited to 100 hours of use during any consecutive rolling 12-month period. Records shall be maintained in accordance with Proviso 18.

15. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.

16. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

17. The permittee shall comply with the applicable requirements of 40 CFR 60, Subpart IIII, the Standards of Performance for Stationary Compression Ignition Internal Combustions Engines, which include, but may not be limited to the following:

    (a) In accordance with 40 CFR §60.4205(b) and §60.4202(a)(2), the permittee shall not cause or allow the emissions from these units to exceed the applicable emission standards in 40 CFR §89.112, specifically:

        i) The sum of the emissions of non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_x) shall not exceed 6.4 g/kW-hr;

        ii) Carbon monoxide emissions shall not exceed 3.5 g/kW-hr;

        iii) Particulate matter (PM) emissions shall not exceed 0.20 g/kW-hr;

    (b) In accordance with 40 CFR §60.4206 and §60.4211(a), the permittee shall operate and maintain these units according to the manufacturer's written instructions;

(c) In accordance with 40 CFR §60.4207, the permittee shall not purchase any diesel fuel for combustion in these units that does not meet the following per-gallon standards of 40 CFR §80.510(b):

i) Sulfur content shall not exceed 15 parts per million (ppm)

ii) Cetane index shall be a minimum of 40 or the aromatic content shall not exceed 35 volume percent;

(d) In accordance with 40 CFR §60.4209, the permittee shall install and operate a non-resettable hour meter;

(e) In accordance with §60.4211(e), the permittee shall only operate these units as specified below:

i) Emergency situations;

ii) Maintenance checks and readiness testing not to exceed 100 hours per year; and

iii) Non-emergency situations, not to exceed 50 hours per year (these 50 hours count toward the 100 hours per year allowed for maintenance checks and readiness testing). The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

18. The permittee shall comply with the applicable requirements of 40 CFR 63, Subpart ZZZZ, the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. As specified in 40 CFR §63.6675, the permittee shall not operate these units except as allowed in §63.6640(f)(1) through (2), which includes the following:

(a) Emergency situations;

(b) Maintenance checks and readiness testing, not to exceed 100 hours per year; and

(c) Non-emergency situations, not to exceed 50 hours per year (these 50 hours count toward the 100 hours per year allowed for maintenance checks and readiness testing). The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

19. To demonstrate compliance with the operational limitations, the permittee shall maintain records of the date, time, duration, and purpose of operation each time this unit is operated. These records shall be maintained in a permanent form suitable for inspection and shall be readily available for inspection upon request. These records shall be retained for a period of 5 years from the date of generation of each record.

20. To demonstrate compliance with the fuel limitations, the permittee shall maintain records of the sulfur content and either the Cetane index or aromatic content of the diesel fuel that is purchased for combustion in this unit. These records shall be maintained in a permanent form suitable for inspection and shall be readily available for inspection upon request. These records shall be retained for a period of 5 years from the date of generation of each record.

Bayer Crop Science LP
Theodore, Alabama
503-0137-X003
Provisos

73. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

74. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

75. A new permit application must be made for new sources, replacements, alterations, or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants.

76. Upon the request of the Department, each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

77. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than **1 hour**, the intent to shut down shall be reported to the Air Division at least 24 hours prior to the planned shutdown, **unless accompanied by the immediate shutdown of the emission source**.

78. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than **1 hour**, the person responsible for such equipment shall notify the Department within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

79. This process including all air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

80. This permit expires and the application is cancelled if construction has not begun within 24 months of the date of issuance of the permit.

81. On completion of construction of the device for which this permit is issued, notification of the fact is to be given to the Chief of the Air Division. Authorization to operate the unit must be received from the Chief of the Air Division. Failure to notify the Chief of the Air Division of construction and/or operation without authorization could result in revocation of this permit.

82. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

83. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

84. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

85. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.

86. Records will be maintained of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the process equipment and any malfunction of the air pollution control equipment. These records will be kept in a permanent form suitable for inspection and will be retained for at least two years following the date of each occurrence.

87. Methanol storage tank BA-100 shall be controlled equivalent to the requirements of 40 CFR 63.1362(c) of 40 CFR Part 63, Subpart MMM.

88. Carbon Tetrachloride Tank BA-150 and Methanol Tank BA-100 shall be routed to thermal oxidizer S01 or S03 for Control.

89. Storage Tanks BA-100 and BA-150 shall be operated utilizing bottom filling in order to comply with ADEM Admin Code 335-3-6-.03.

90. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.

91. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

92. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the permit readily available for inspection by any or all persons who may request to see it.

DRAFT
Date

CHECKLIST FOR ISSUANCE OF AIR PERMIT

Permit Number: **503-0137-X001**

Company: **Bayer Crop Science LP**

Location: **Theodore, Alabama**

Description of Permit Unit: **GA50 and Ammonium Chloride Production Facility with Thermal Oxidizer, Heat Recovery Steam Generator, and HCl Scrubber (S01) in Series, Process Flare (S02), Back-up Thermal Oxidizer and HCl Scrubber (S03) in Series, Bleach Scrubber (S04), HCl Scrubber (S05), Two Water Scrubbers (S06 & S08), and Bag Filter (S07) for Control.**

Pollutant Type:

Particulates	01	Total Reduced Sulfur	06	Lead	11
Sulfur Oxides	02	Asbestos	07	Mercury	12
Carbon Monoxide	03	Beryllium	08	Benzene	13
Hydrocarbons	04	Chlorine	09		
Nitrogen Oxides	05	Hydrogen Sulfide	10		

Pollutant Type	Expected Emissions (lbs/hr)	Method of Estimate	Uncontrolled Emissions (lbs/hr)	Controlled Emissions (lbs/hr)	Allowable Emissions (lbs/hr)
01	S06 & S07			0.05 each	0.10 each
03	S01 & S03			1.15 & 0.03	1.15 & 0.03
04	S01 or S03			0.46	98% DRE or 20 ppm
05	S01 & S03			3.45 & 0.04	3.45
GHGs	S01		12,277	12,277	

Operating Hours per year: **8760**

Provisos: **See Attached**

Mail to: **Mr. Karl Bloss**
IGAP Technical Manager
Bayer Crop Science LP
4201 Degussa Road
Theodore, Alabama 36582

Engineer: **Will Bacon**

Date: **December 30, 2013**

Type: PSD [ ] SMS [X] NAME [ ] MOD [ ] TEMP [ ] OTHER **New Source**

Source: NSPS [X] NESHAP [X] SIP [X] OTHER: **Part 63 MMM Equivalent**

CHECKLIST FOR ISSUANCE OF AIR PERMIT

Permit Number: **503-0137-X002**

Company: **Bayer Crop Science LP**

Location: **Theodore, Alabama**

Description of Permit Unit: **Two - 3400 HP (2500 kWm) Emergency Compression Ignition Diesel-Fired Reciprocating Internal Combustion Engines**

Pollutant Type:

Particulates	01	Total Reduced Sulfur	06	Lead	11
Sulfur Oxides	02	Asbestos	07	Mercury	12
Carbon Monoxide	03	Beryllium	08	Benzene	13
Hydrocarbons	04	Chlorine	09		
Nitrogen Oxides	05	Hydrogen Sulfide	10		

Pollutant Type	Expected Emissions (lbs/hr)	Method of Estimate	Uncontrolled Emissions (lbs/hr)	Controlled Emissions (lbs/hr)	Allowable Emissions (lbs/hr)
01		Subpart IIII		Each	0.06 TPY
02		Subpart IIII		Each	15 ppmw
03		Subpart IIII		Each	1.07 TPY
04 & 05 Combined		Subpart IIII		Each	2.41 TPY

Operating Hours per year: **8760**

Provisos: **See Attached**

Mail to: **Mr. Karl Bloss**
IGAP Technical Manager
Bayer Crop Science LP
4201 Degussa Road
Theodore, Alabama 36582

Engineer: **Will Bacon**

Date: **December 30, 2013**

Type: PSD [ ] SMS [X] NAME [ ] MOD [ ] TEMP [ ] OTHER: **New Source**

Source: NSPS [X] NESHAP [X] SIP [X] OTHER:

CHECKLIST FOR ISSUANCE OF AIR PERMIT

Permit Number: **503-0137-X002**

Company: **Bayer Crop Science LP**

Location: **Theodore, Alabama**

Description of Permit Unit: **25,000 Gallon Fixed Roof Storage Tank for the Storage of Methanol and 8,000 Gallon Fixed Roof Storage Tank for the Storage of Carbon Tetrachloride both routed to S01 for Controlt**

Pollutant Type:

Particulates	01	Total Reduced Sulfur	06	Lead	11
Sulfur Oxides	02	Asbestos	07	Mercury	12
Carbon Monoxide	03	Beryllium	08	Benzene	13
Hydrocarbons	04	Chlorine	09		
Nitrogen Oxides	05	Hydrogen Sulfide	10		

Pollutant Type	Expected Emissions (lbs/hr)	Method of Estimate	Uncontrolled Emissions (lbs/hr)	Controlled Emissions (lbs/hr)	Allowable Emissions (lbs/hr)
04				Trivial	

Operating Hours per year: **8760**

Provisos: **See Attached**

Mail to: **Mr. Karl Bloss**
IGAP Technical Manager
Bayer Crop Science LP
4201 Degussa Road
Theodore, Alabama 36582

Engineer: **Will Bacon**

Date: **December 30, 2013**

Type: PSD [ ] SMS [X] NAME [ ] MOD [ ] TEMP [ ] OTHER: **New Source**
Source: NSPS [ ] NESHAP [X] SIP [X] OTHER: